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U.S.D.A. FOREST SERVICE
DANIEL BOONE NATIONAL FOREST
MOREHEAD RANGER DISTRICT

RECREATION OPPORTUNITY SPECTRUM
FOR A
SELECTED AREA ON THE MOREHEAD
RANGER DISTRICT

94951
by

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RECREATION OPPORTUNITY SPECTRUM

FOR A

SELECTED AREA ON THE MOREHEAD

RANGER DISTRICT

ABSTRACT

The Morehead Ranger District, Daniel Boone National Forest, is located in the Cumberland Mountains in northeastern Kentucky. Recreation management is a major activity of the Forest Service in this area, which by 1985, will be within 3 hours driving distance of over 7 million people.

This paper develops R.O.S. classes and recreation supply computations for over 73,000 acres of the Ranger District. Of the six R.O.S. classes, 5 are available within the project area. The roaded natural and rural provide the largest available opportunity, while the more primitive (semi-primitive non-motorized and semi-primitive motorized) are relatively small. Urban recreation opportunities are insignificant.

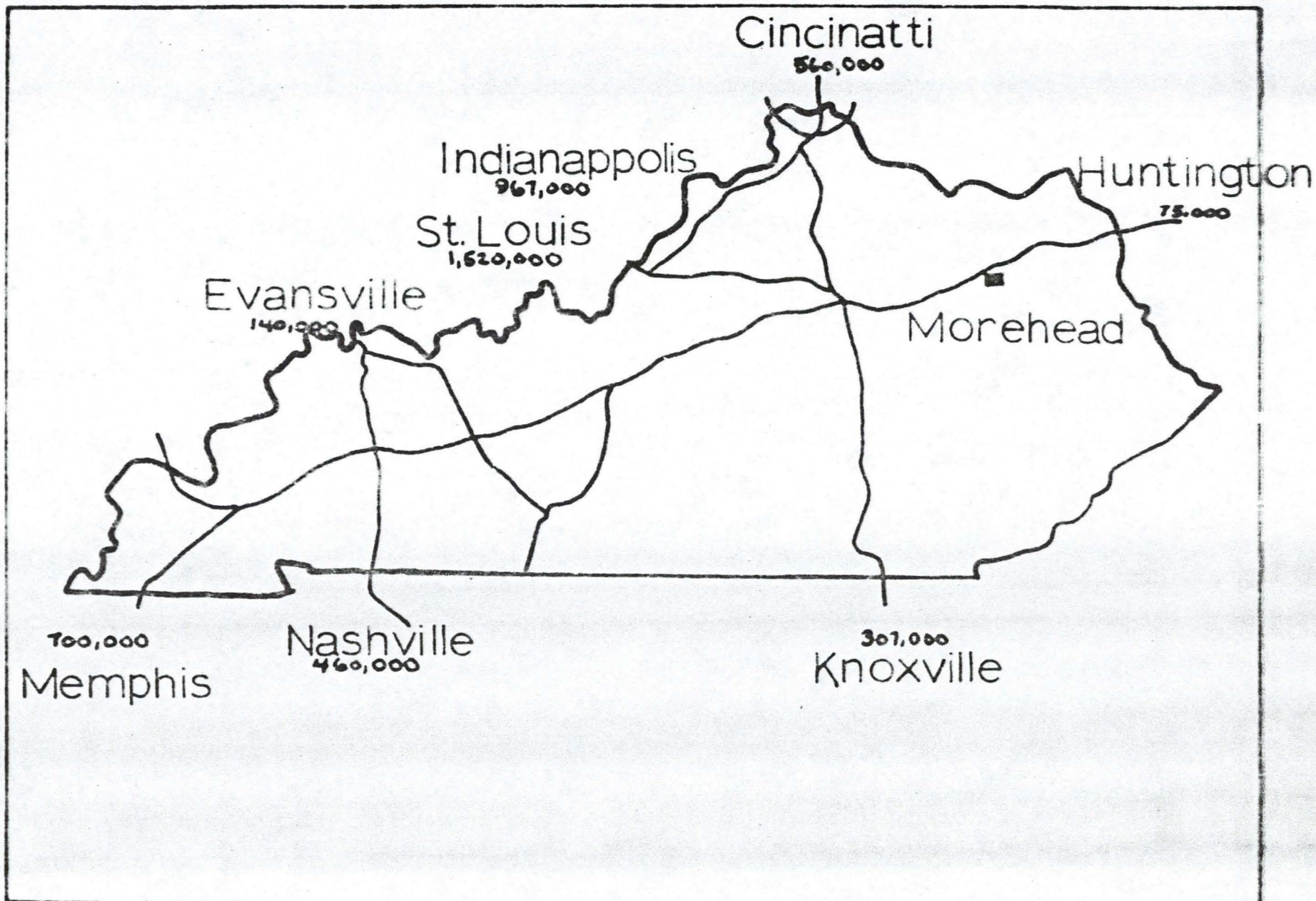
Recreation Area	Sanitary		Picnic		Parking			Trails			Sewer Line		Recreation Season		
	Comfort Station	Chemical Toilet	Lift Stations	Single	Double	Car/Trailer	Handicapped Car/Trailer	Car Only	Handicapped Car	Light Standards	Gravel Miles	Paved Miles		Force Main Miles	Gravity Miles
HIGH BANK	1			10	2	3	1	16		1	.3			.12	Open Year Round
BILLY BRANCH	1		1	20	3	10		29	1	3	.7		.09		Same as Twin Knobs Rec. Area
OAKRIDGE	At Marina		1								.4	.3	.15	.28	Open Year Round
BOAT GUNNEL BRANCH	1		1	28	7	4	1	58	2	2	.6	.9	.24		Same as Twin Knobs Rec. Area
SHALLOW FLATS		2						19	1	1		.2			Same as Twin Knobs Rec. Area
MUSKIE BEND		2				8	2	21	1	2	.2	.2			Same as Twin Knobs Rec. Area
LAKEVIEW		2		25						2	.2				Same as Twin Knobs Rec. Area
RANEY CREEK		2		8	1			11		1	.6				Same as Twin Knobs Rec. Area
WINDY BAY		2						20		1	.6				Same as Twin Knobs Rec. Area
TOTALS	3	10	3	91	13	34	5	187	6	15	3.6	1.5	.48	.40	

*Goose Pond Overlook Open
Open Year Round

VICINITY MAP

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VICINITY MAP



INTRODUCTION

To make the FOS discussed in this report meaningful to the reader, he must first be provided with background information concerning the setting in question.

The Morehead Ranger District is located in portions of four counties in northeastern Kentucky including 110,804 acres of National Forest land interspersed with private land. The status map located in the Appendix shows the location of National Forest in relation to private land.

There are no large population centers within the District. The largest city is Morehead with a population of 6,977, swelling to approximately 14,000 when Morehead State University is in session. There are, however, a number of large cities within less than one-half days driving distance. For instance, Cincinnati, Ohio is approximately 150 miles north and Huntington, West Virginia is 65 miles to the east. By 1985 there will be approximately 7,200,000 people within three hours driving distance of the Morehead Ranger District.

The climate in this part of Kentucky is generally temperate with moderately cold winters and warm, humid summers. Temperatures in the summer months seldom exceed 100°F and tend to range from the high 70's to the middle 90's. During the fall months the weather is characteristically very pleasant with clear, cool evenings and comfortably warm, clear, dry days. This, combined with the changing colors of hardwood foliage throughout the mountains, make it an especially pleasing place to live or to recreate. The trans-

sition from fall to winter is normally gradual from the peak of foliage colors to the time the trees become barren and temperatures drop to below freezing. During the winter months temperatures may occasionally fall to below 0°F or there may be light snow but these two things do not normally last in excess of a few days. As winter melts into spring the October phenomenon of cool, clear nights and warm days is once again exhibited. Precipitation is fairly well distributed throughout the year with no wet season and no dry season. Average annual precipitation is about 45 inches. The growing season is approximately 166 days long.

Kentucky is famous for its race horses, tobacco and bourbon whiskey - next to these three is coal which constitutes a major part of its economy. Coal production within the Morehead Ranger District is limited due to the thickness of the coal seams in this area. Outcrops and old workings suggest that coal is present over much of the southeastern part of the area but the thickness of the seams is only 14-27 inches and is considered minimal for mining. The counties within the Morehead Ranger District do not have a sound economic base in that none of the "industries", mentioned previously are active. The terrain is not conducive to raising race horses, neither is there much tobacco land and all but one of the counties is "dry". There is some light industry and a few small sawmills and timber companies, although an active, viable timber market is not present. For instance, average stumpage for upland hardwoods is about \$30 per MBF.

The Morehead Ranger District is within the Cumberland Plateau and is characterized by a dissected, mountainous topography except the western edge of the District starts the transition from mountainous terrain

to the rolling hills of the "Bluegrass". There are occasional fairly broad valleys between the heavily timbered mountains.

The Morehead Ranger District is unique in that the Forest Service is sole manager of Cave Run Lake, an almost 9,000 acre impoundment built by the U.S. Army Corps of Engineers. Under agreements with that agency, they pay for construction of recreation facilities adjacent to the Lake and the Forest Service manages them thereafter. At the present time there is a highly developed recreation area (Twin Knobs) containing 257 camping units with comfort stations containing showers and flush toilets; 2,000 foot long sand beach with supervised swimming and bathhouse; approximately four miles of paved and two miles of gravel hiking trail; scenic overlook; two developed boat ramps (one has a fish cleaning station and comfort station); courtesy launching docks and three group use picnic/camping areas. Twin Knobs has a PAOT capacity of 3,955.

The following is statistical information for the campground, beach, group use areas and sightseers at Twin Knobs. Complete visitation records were maintained during the recreation season by entrance station personnel who were on duty 24 hours a day from Memorial Day through Labor Day. Statistics were evaluated by grouping states into "Regional" and "Non-Regional". "Regional" states were considered to be the seven states which surround and share a common boundary with Kentucky. "Non-Regional" states include all other states and foreign countries. Weekdays included Monday through Thursday and weekends included Friday through Sunday.

Campground

There were almost 50,000 visitors that camped at Twin Knobs in 1980. The campground had a 60-70 percent occupancy rate during weekdays and was full on most weekends during the summer. Our statistics verify our experience that Twin Knobs draws a characteristic clientele from predictable areas of the state. The four day average length of stay, large number of repeat campers, records of visitor protection incidents and perpetual vehicle parking problems reveal the social (rather than environmental) expectation and recreation experience characteristics of Twin Knobs' campers.

Group Use Areas

Approximately 4,153 visitors used the two group use areas in Twin Knobs. The statistics show a nearly equal number of users in each of the two areas. Twice as many users were multiple day use as opposed to single day use indicating strong demand for group camping facilities. All out-of-state groups (Indiana, Ohio) made advance reservations to stay overnight.

The group use areas were utilized every weekend and 70 percent of the weekdays. The group use areas, unlike the campground appear to be utilized less early in the season and then not drop off as quickly after Labor Day. Our records show that the group use areas were rented to only three groups at the end of April and none in November.

Beach

The entrance station counted 68,606 people in vehicles purchasing a day-use beach pass. The actual figure is considerably higher due to swimmers from the campground, group use areas and boat parking that were not counted. The largest one-day crowd numbered 3,100 on June 22.

Beach attendance was four times higher than in 1979 and has increased more than 13 times in only two years. Weekday crowds this season were two-thirds as large as on the weekend and daily records show weekday crowds as large or larger than weekend crowds on several occasions. The large drop-off in August beach attendance is related to the start of public schools, colleges, and universities.

Sightseers

A sightseers pass was developed for the 1980 season and utilized by 751 vehicles to Twin Knobs. The actual number of sightseeing visitors is about 3,004 based on an average of four persons per vehicle. Again, like the campground, most sightseers were from Kentucky, Ohio and West Virginia. Statistics on sightseers were broken down by individual counties in Kentucky.

In summary, during the 1980 recreation season over 125,369 people from 38 states and four foreign countries, (Germany, Italy, Japan, and Canada) visited the Twin Knobs Recreation Area. The total capacity of the area is 3,955 PAOT and provided 957,110 full service PAOT days for the recreating public.

Other existing facilities within the immediate area of Cave Run Lake include:

<u>NAME</u>	<u>PAOT</u>	<u>USE SEASON</u> <u>DAYS</u>	<u>REMARKS</u>
Scott's Cr. Marina	750	365	Under Special Use Permit
Longbow Marina	100	365	Satellite of Scott's Cr.
Clear Cr. Rec. Area	195	275	Non-Fee Recreation Area
Clear Cr. Shooting Range	25	365	
Clay Lick Boat-in Campground	100	365	
<u>Sheltowee Trace NRT</u>	N/A	365	30 miles long
Pioneer Weapons Hunt- ing Area	N/A	365	7,200 acres
Developed Boat Ramps	2,640	365	
Minor E. Clark Fish Hatchery	N/A	N/A	State Fish Hatchery - 2nd largest warm water hatchery in U.S.

In addition to these facilities another developed recreation area of the same magnitude as Twin Knobs is under construction and will be operational by the Fall of 1982. This recreation area is on the opposite shore of Cave Run Lake from Twin Knobs, and is different only in its remoteness.

Other recreation facilities in varying stages of planning and construction around the Lake include:

1. Ten picnic grounds which will offer 232 vehicle and/or trailer parking spaces; 104 picnic units; three comfort stations with flush toilets; ten chemical toilets; 1.5 miles of paved and 3.6 miles of gravelled trail.
2. Two developed fishing points on the shoreline with trail access.
3. A self-contained visitor information center.
4. Giant Canada Goose project for visitor viewing.
5. A resort complex which will be under special use permit from the U.S. Forest Service. This complex will provide, at a minimum, a 200 unit lodge and marina with associated facilities and services.

It is obvious that Cave Run Lake is the focal point for the majority of recreation activity on the Morehead Ranger District. Therefore, this project will "key" on the Lake and areas adjacent. In this case, for convenience and ease of understanding, two 7.5 minute U.S.G.S. Quadrangle

maps will be used to develop the Recreation Opportunity Spectrum for this project.

Directions that were available for this project include a short, general discussion of Recreation Opportunity Planning provided at Clemson University in the Fall of 1980 and a review draft of FSH 2309.13, Recreation Planning Handbook also provided at Clemson. Little attention had been given to this process at the Forest level at that time and the Forest is just now beginning development of R.O.S. for the Forest Plan. Therefore, I used the material that was available to me with some assistance from a landscape architect who has just transferred from the Toiyabe National Forest where R.O.P. has been completed.

R.O.S. Classes

The first step in developing the R.O.S. was to delineate classes based on physical, social and managerial settings using mapping criteria of remoteness, size and evidence of humans for the physical setting; user density for the social setting; managerial regimentation and noticeability for the managerial setting.

Physical Setting

In making the physical setting overlay, a "pure" ½ mile boundary from Better-than-Primitive roads was drawn on the 7.5 minute Quads. This proved to be an unrealistic boundary due to terrain features and vegetation density so this boundary was adjusted. Once the Roaded Natural Boundary was adjusted,

the rural and urban classes were delineated based on personal experience and field checks. As can be seen on the remoteness overlay, there were four major areas on the west side of the Lake which were classed as more primitive than roaded natural. On the east side of the Lake there were eight. When delineating semi-primitive motorized and semi-primitive non-motorized (there were no primitive), I assumed that Cave Run Lake and its major tributaries fell in the semi-primitive motorized class.

Once all areas were classified using the remoteness criteria, a size criteria was used to modify classes once more. Previously I explained that for purposes of delineating classes by remoteness, I assumed Cave Run Lake and its major tributaries to be semi-primitive motorized. This assumption was not used for modifying by size criteria. For instance, there were a number of small (100-1,500 acre) areas adjacent to the Lake which would remain semi-primitive motorized if the Lake were assumed to be the same. I judged this to be inappropriate due to the highly transitory, although motorized, use on the Lake. Therefore, these small areas of semi-primitive motorized were made a part of the next non-developed class or combined with an adjacent more primitive class and kept static in class, i.e. two 1,500 plus acre areas in the northern portion of the Salt Lick Quad., one semi-primitive motorized and one semi-primitive non-motorized were combined to make a 3,000 plus acre area of semi-primitive motorized.

The Evidence of Humans Criteria, when applied to classes defined by remoteness and size did not cause significant changes in the classes established. Therefore, the overlay was not modified further.

Social Setting

After review and discussion of the social setting criteria and comparison of R.O.S. classes based on physical setting and social setting, I decided that the differences in the two are insignificant and the R.O.S. class areas would have no inconsistencies.

Managerial Setting

Based on criteria for this setting there were two setting inconsistencies identified. One is the large (3,000+ acres) area in the northern portion of the Salt Lick Quadrangle. Physical setting criteria made the entire area semi-primitive motorized whereas the area was split into two smaller units, based on managerial setting criteria. - One part of the large area under managerial setting criteria is classed as primitive and the other remains as semi-primitive motorized. The other area is in the southern portion of the Salt Lick Quadrangle and under physical setting criteria was semi-primitive motorized but under managerial setting criteria is primitive.

In both cases mentioned above, I feel that the areas are best kept in the R.O.S. class delineated using the physical setting. In both cases the change would have been toward the primitive end of the Recreation Opportunity Spectrum and in my opinion primitive recreation in the subject area is not available due to evidence of humans and size, i.e. on both of these areas it is not rare to find drink cans, food containers and other trash. In addition, there is no opportunity to feel a sense of vastness and self-sufficiency as suggested in the R.O.P. handbook.

R.O.S. CLASS ATTRACTIVENESS

An attractiveness overlay was not completed for his project, Issues and Concerns identified for the Forest Land and Resource Management Plan did not speak to this subject.

ACTIVITY OPPORTUNITIES

Recreation use in the project area includes activities ranging from highly developed camping and picnic sites described earlier to dispersed activities such as hiking, hunting, sightseeing, backpacking, horseback riding, and cross-country skiing. Cave Run provides opportunities for engaging in water sports such as boating, fishing, water-skiing and swimming.

The number of visitor days to this area during CY 1980 is estimated for the following activities:

<u>Activity</u>	<u>M Visitor Days</u>
Auto, Scooter, Motorcycle Driving	22.0
Boating	56.5
Camping	187.0
Fishing	29.0
Hiking & Mountain Climbing	16.0
Waterskiing	18.7
Hunting	18.2
Picnicing	13.7
Viewing Scenery & Works of Man	13.0
Nature Study & Gathering Forest Products	2.0
Swimming, Diving	20.0
Other (Games, Horseback Riding, Bicycle Riding)	<u>11.0</u>
TOTAL	406.1

Existing facilities, both private and public, in the project area include:
(Also see attached map)

<u>Site</u>	<u>Facilities</u>	<u>PAOT</u>	<u>Remarks</u>
Scott's Creek	230 Slip Marina with parking lot for 150 vehicles	750	Under Special Use Permit from U.S. Forest Service

Clear Cr. Camp-ground	24 Units	120	
Clear Cr. Picnic Ground	14 Units	75	
Clear Cr. Shooting	15 Parking Spaces	25	
Clay Lick Boat-in Campground	20 Units	100	Only Boat-in Camping on Cave Run Lake
Clay Lick Boat Ramp	2 lane ramp, 75 parking spaces, toilets	375	
Bangor Boat Ramp	1 lane ramp, 40 parking spaces, toilets	200	
Leatherwood Boat Ramp	2 lane ramp, 78 parking spaces, toilets	390	
Scott's Cr. Boat Ramp	2 lane Ramp, 70 parking spaces, comfort station	350	Adjacent to Scott's Cr. Marina

Twin Knobs Boat Ramp	2 lane Ramp, 80 parking spaces, comfort station, fish cleaning station	400	Within Twin Knobs Recreation Area
Twin Knobs/Alfrey Boat Ramp	2 lane Ramp, 80 parking spaces, toilets	400	Within Twin Knobs Recreation Area
Warix Run Boat Ramp	2 lane Ramp, 54 parking spaces, toilet	270	
Poppin Rock Boat Ramp	2 lane Ramp, 79 parking spaces, toilets	395	
Sheltowee Trace HRT	30 mile long, signed, maintained trail		A portion of the 253 mile trail from N.E. Kentucky to Tennessee.
Pioneer Weapons Hunting Area	7,200 Acre tract of land managed cooperatively with Kentucky Dept. of Fish & Wildlife	---	Adjacent to Cave Run Lake

Minor E. Clark	---	---	State Fish Hatchery -
Fish Hatchery			2nd largest warm water fish hatchery in U.S.

801 Camper Village	10 cabins with grocery and rentals	---	Private Facility
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Fin, Fur & Feather	Grocery, restaurant, bait shop	---	Private
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Sailboat Storage	50 boat capacity	---	Private
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Proposed facilities which are either under construction or in the planning stages include: (Also see attached map)

<u>Site</u>	<u>Facilities</u>	<u>PAOT</u>	<u>Remarks</u>
Zilpo Recreation Area	About the same as Twin Knobs, al- though somewhat smaller	3500	Construction to be completed Fall 1982.
Ky. Hwy. 801 Pic- nic Areas	See attached sheet	Approx. 1000	

<u>Recreation Area</u>	<u>Sanitary</u>	<u>Picnic</u>			<u>Parking</u>			<u>Trails</u>			<u>Line</u>		<u>Recreation Season</u>
HIGH BANK	1	10	2	3	1	16		1	.3		.12		Open Year Round
BILLY BRANCH	1	1	20	3	10	29	1	3	.7		.09		Same as Twin Knobs Rec. Area
OAKRIDGE	At Marina	1							.4	.3	.15	.28	Open Year Round
BOAT GUNNEL BRANCH	1	1	28	7	4	1	58	2	2	.6	.8	.24	Same as Twin Knobs Rec. Area
SHALLOW FLATS	2					19	1	1		.2			Same as Twin Knobs Rec. Area
MUSKIE BEND	2			8	2	21	1	2	.2	.2			Same as Twin Knobs Rec. Area
LAKEVIEW	2	25						2	.2				Same as Twin Knobs Rec. Area
RAMEY CREEK	2	8	1			11		1	.6				Same as Twin Knobs Rec. Area
WINDY BAY	2					20		1	.6				Same as Twin Knobs Rec. Area
TOTALS	3	10	3	91	13	34	5	187	6	15	3.6	1.5	.48 .40

*Goose Pond Overlook Open
Open Year Round

<u>Site</u>	<u>Facilities</u>	<u>PAOT</u>	<u>Remarks</u>
2 Cave Run Fishing Points	Gravel Pads, lantern holders, trash re- ceptacles, trail access	50	
Visitor Center	Self-contained, wash rooms, auto- matic displays	100	
Giant Canada Goose Project	Overlook with inter- pretive sign, 6 parking spaces	25	
Caney Resort	200 Unit lodge, marina, restaurant, tourist facilities	Approx. 500	Will be under Special Permit from U.S.F.S.
Caney-Zilpo Horse/ Hiking Trail	19 miles maintained trail. Developed trail head.	50	
PL. 566 Reservoir	Boat Ramp, fishing access, toilets	---	Built Cooperatively with SCS.

It is apparent from the preceeding statistics that this relatively small project area is possibly one of the highest recreation use areas in the National Forest System and offers a wide variety of recreation activities. It is also apparent that the private sector is lagging far behind in offering recreation opportunities.

MAP INDEX TO EXISTING FACILITIES

<u>No.</u>	<u>Name</u>
1	Scott's Creek Marina
2	Scott's Creek Boat Ramp
3	Clear Creek Campground
4	Clear Creek Picnic Ground
5	Clear Creek Shooting Range
6	Clay Lick Boat-in Campground
7	Clay Lick Boat Ramp
8	Bangor Boat Ramp
9	Leatherwood Boat Ramp
10	Twin Knobs Boat Ramp
11	Alfrey Boat Ramp
12	Warix Run Boat Ramp
13	Poppin Rock Boat Ramp
14	Sheltowee Trace NRT
15	Pioneer Weapons Hunting Area
16	Minor E. Clark Fish Hatchery
17	801 Camper Village
18	Bait Shop, Store, Restaurant
19	Sail Boat Storage
20	Twin Knobs Recreation Area



EXISTING FACILITIES

MAP INDEX TO FUTURE FACILITIES

<u>No.</u>	<u>Name</u>
1	Zilpo Recreation Area
2	High Bank Picnic Area
3	Billy Branch Picnic Area
4	Oakridge Picnic Area
5	Boat Gunnel Picnic Area
6	Shallow Flats Picnic Area
7	Muskie Bend Picnic Area
8	Lakeview Picnic Area
9	Ramey Creek Picnic Area
10	Windy Bay Picnic Area
11	Fishing Point
12	Fishing Point
13	Visitor Center
14	Giant Canada Goose Project
15	Caney Resort
16	Caney-Zilpo Horse/Hiking Trail
17	PL 566 Reservoir



PROPOSED FACILITIES

ACRES BY R.O.S. CLASS

Primitive		Semi-Primitive Non-Motorized	Semi-Primitive Motorized	Roaded Natural	Rural	Urban
Gross Area*	0	5,633	4,949	56,477	5,605	201
	0%	8%	7%	78%	8%	Less than 1%
Private Area	0 0%	600 2%	900 4%	17,400 71%	5,605 23%	201 1%
National Forest	0 0%	5,033 10%	4,049 8%	39,077 76%	3,128 6%	0 0%
Useable All Ownership	0	5,070	4454	50,829	5,045	201

*Excludes 8,200 acre Cave Run Lake

CAPACITY

The practical maximum capacity for existing developed sites and proposed sites for which design has been completed were not difficult to ascertain. Dispersed sites and activities were "another story". I used the methodology presented in the R.O.P. handbook. One approach presented was to derive a PAOT capacity for the developed sites and useable acres of dispersed area, then convert this figure to Recreation Visitor Days (RVD's) in order to compare supply with RVD units of demand and for resource management planning, monitoring and evaluation. The second approach was to derive capacity directly in RVD's by considering the specific activity mixes occurring on the National Forest.

I used the PAOT approach. The first step was to sum, by R.O.S. class, the PAOT capacity of all existing developed sites. I did this for existing sites as exhibited in Table I, Appendix and for proposed sites as exhibited in Table 2.

Based on my observations and discussion with various disciplines in the Daniel Boone National Forest, I then estimated the maximum PAOT capacity of the dispersed area within each class for the useable acres in that class. Useable acres, for the purpose of this report, is defined as those areas of less than 30% slope. Comparisons of a number of computer programs producing slope and elevational printouts and hand computations were used to arrive at a useable acreage in the dispersed areas. All of this resulted in Table 3 which shows useable acres, PAOT per acre and total acres by class.

I then converted PAOT per acre into RVD's using the formula in the Recreation Opportunity Planning Handbook. These computations are summarized in Table 4. These can be used to compare supply with RVD units of demand and for land and resource management planning, monitoring and evaluation.

APPENDIX

TABLE 1
MAX. RVD'S/YR EXISTING SITES

FACILITY	D -Day ON-Overnight TYPE USE	PAOT	MS	PU	Hrs/12 LOS	RVD's	R.O.S. CLASS
Scott's Cr. Marina	D	750	365	.50	.83	113,606	R
Scott's Cr. Boat Ramp	D	350	365	.45	.67	38,517	R
Clear Cr. Campground	ON	120	271	.43	4.0	55,934	R
Clear Cr. Pic- nic Area	D	75	271	.43	.50	4,370	R
Clear Cr. Shoot- ing Range	D	25	365	.43	.50	1,962	R
Clay Lick Boat- in C.G.	ON	100	365	.50	4.0	73,000	R
Clay Lick Boat Ramp	D	375	365	.45	.67	41,268	R
Bangor Boat Ramp	D	200	365	.65	.50	23,725	R
Leatherwood Boat Ramp	D	390	365	.50	.67	47,687	R
Twin Knobs Boat Ramp	D	400	243	.43	.67	28,004	R
Alfrey Boat Ramp	D	400	243	.43	.67	28,004	R
Warix Run Boat Ramp	D	270	365	.45	.67	29,713	R
Poppin Run Boat Ramp	D	395	365	.50	.33	23,789	R
Fish Hatchery	D	100	365	.65	117	4,033	

TABLE 1 (Con't)

FACILITY	D -Day ON-Overnight TYPE USE	PAOT	MS	PU	Hrs/12 LOS	RVD's	R.O.S. CLASS
801 Camper Village	ON	50	365	.50	4.0	36,500	R
Fin, Fur & Feather	D	25	365	.45	.08	328	R
Sailboat Storage	ON	50	365	.45	.17	1,396	R
Twin Knobs Camp- ground	ON	1100	211	.80	8.0	1,485,440	R
Twin Knobs Beach	D	2100	107	.80	.33	59,321	R
Twin Knobs Group Areas	D/ON	300	240	.80	1.0	57,600	R
TOTAL		7575				2,697,197	

TABLE 2
MAX. RVD'S/Yr FUTURE SITES

FACILITY	TYPE USE	PAOT	MS	PU	Hrs/12 LOS	RVD's	R.O.S. CLASS
Zilpo Camp-ground	ON	900	211	.80	8.0	1,215,360	R
Zilpo Beach	D	1000	100	.80	.33	26,400	R
High Bank Pic-nic Area	D	70	365	.50	.33	4,216	R
Billy Branch Picnic Area	D	130	211	.45	.50	6,172	R
Boat Gunnel Picnic Area	D	210	211	.45	.50	9,970	R
Shallow Flats Picnic Area	D	100	365	.50	.33	6,022	R
Muskie Bend Picnic Area	D	150	365	.50	.33	9,034	R
Lakeview Picnic Area	D	125	365	.50	.25	5,703	R
Ramey Cr. Pic-nic Area	D	40	211	.45	.42	1,595	R
Windy Bay Pic-nic Area	D	100	365	.50	.25	4,562	R
2 Fishing Points	D	50	211	.80	.42	3,545	R
Visitor Center	D	100	211	.80	.08	1,350	R
Goose Project	D	25	365	.80	.08	584	R
Caney Resort	D/ON	500	365	.65	6.0	711,750	R
PL 566 Reser-voir	D	100	365	.45	.58	9,526	R
TOTAL		3,600				2,019,789	

TABLE 3

	<u>SPNM</u>	<u>SPM</u>	<u>RN</u>	<u>R</u>
PAOT/Acre	.05	.06	2.0	6.0
Useable Acres	5,070	4,454	50,829	5,045
Total PAOT	254	267	101,658	30,270

TABLE 4

	<u>SPNM</u>	<u>SPM</u>	<u>RN</u>	<u>R</u>
Max. Practical RVD's	27,813	29,383	20,018,239	12,750,632